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ABSTRACT

The first part of this paper synthesizes a model for conducting inservice activities to assist schools in defining assessing the extent of open education and in identifying the action steps needed to move toward greater open education in classroom and school. Some of the implications of the basic assumptions underlying open education are developed, and a method of evaluating the various aspects of an open education program is presented. Next, the document focuses on the open area school -- its advantages, disadvantages, and problems -- with problem solutions being offered. Much of the data is based on the experience of selected teachers and principals in open area schools in Ontario, Canada. (Author/MLF)

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OPEN EDUCATION AND OPEN AREA SCHOOLS

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OPEN EDUCATION AND OPEN AREA SCHOOLS

Introduction

This paper consists of two sections: (1) The Essence of Open Education, and (2) Open Area Schools. In the first section, the authors present a synthesis of a model for conducting inservice activities for assisting schools to define and assess the extent of open education and to identify the action steps needed to move toward greater open education in one's classroom and school. Some of the implications of the basic assumptions underlying open education are developed and a method of evaluating aspects of open education programs is presented. In the second section, the focus is on open area schools -- the advantages, disadvantages, problems, and problem solutions are offered. Much of this data is based on the experience of selected teachers and principals in open area schools in Ontario.

SECTION I

The Essence of Open Education

A. Defining Open Education

Many words have been used to identify and describe open education. Some people equate open education with the progressivism of Dewey, some use the terms continuous progress and nongradedness, some use free schools; some use terms such as open concept, open schools, open area, open space. The reasoning or rationale for the variation in terms is related somewhat to the range of differences in meaning. Each of the above terms is perceived by the person using it as defining the basic concepts associated with some aspects of open education.

Consider what happens when you ask a group of educators to define open education--"What two or three central concepts come to your mind when asked to define or describe open education?" Put another way, "if you have open education in your school or classroom, what is going on--what terms describe what it is you have?" During many of the inservice programs conducted by the project team we have asked these questions (or variations of them). The results of one such session is indicated in Table 1.

TABLE 1

RESPONSE CATEGORIES	NUMBER OF RESPONSES
1. Humanism, personal growth	18
2. Flexibility of structure	18
3. Self-directed learning	16
4. Personal freedom	13
5. Individualizing instruction	12
6. Physical use of large space	10
7. Child-centered approach	8
8. Pupil involvement in planning and learning	6
9. Continuous progress	4
10. Development of responsibility	4
11. Interaction	3
12. Cooperation	3

The process of identifying the key elements of open education is one that can be valuable in all school settings. It permits members of a staff to develop their own definition in a way that has meaning in terms of what they do in the classroom. This process of developing a philosophy of a school and operationalizing the key elements of the philosophy is a necessary one, irrespective of the formally adopted position. However, a more scientific way is needed--one that permits a teacher or principal to assess the extent of openness and to identify the tasks to be taken.

Consider the following definition: Open education is education which maximizes student choice in all dimensions of schooling--these dimensions are (1) Setting Instructional Objectives, (2) Materials and Activities, (3) Physical Environment, (4) Structure for Decision Making, (5) Time Scheduling, (6) Individualization of Instruction, (7) Composition of Classes, (8) Role of Teacher, (9) Student Evaluation, and (10) Student Control.

Several key points need to be expanded and restated. First of all, student choice and freedom (or the potential for student choice or freedom) is the major concept. To the extent that this choice is limited, education becomes less open. Secondly, the definition implies a continuum, that is, degrees (or extent) of openness; open education in an absolute sense cannot exist. Complete student choice and freedom in all respects is never possible in a social sense, and, obviously, no one would want this even if possible. Therefore, since we have a continuum, one can consider extent or degrees of openness in two ways--by summing all dimensions, we obtain an estimate of the total openness of the classroom and/or school; secondly, by considering each dimension as a separate entity, one can develop a profile of openness based on each of the selected components. Therefore, two classrooms may be equally open in one sense (considering the summative approach), yet be quite different

because of the openness of the selected components (profile).

The third point to be considered in this definition is that the dimensions must be at a level of generalization that applies to all schools or classrooms. All three factors considered, then all schools or classrooms can be defined as having some degree of openness; classrooms will vary in the profile of openness, and in the total extent of openness.

B. Student Choice and Dimensions of Schooling

Dimension 1: Setting Instructional Objectives

Many of the proponents and practitioners of open education have difficulty with persuading the general public to support open education for several reasons, one being that they tend to emphasize the "social" and "humanistic" objectives at the expense of the basic skill areas and what many consider the basic studies curriculum. Most schools don't really avoid the basic traditional objectives; they simply give the impression that their form of open education ignores these objectives. In the dimension considered here, the main issue question is not with the objectives, but rather who sets them. To the extent that student choice (input) into the selection of objectives is enhanced, the greater the openness of education.*

The greater the potential for student choice in objective setting, the greater the openness of education. This applies to all forms of schooling at any age level. If the objectives at all levels for all aspects of the program are "handed down" with no room for student choice, then one might be

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* It must be stated quite clearly that we are defining and describing open education, not recommending its adoption in most extreme form in each dimension.

describing the least open program in terms of this one dimension. This doesn't mean, however, that we are describing a least open program with respect to the summation of all dimensions; each must be considered separately.

Also, one must recognize the interrelatedness of dimensions. If we are trying to foster student development individually (rates of progress and style of learning), then it seems to follow that objectives must be set by the student (of course, with differing amounts of assistance from many sources--teachers, parents, peers, etc.).

Dimension 2: Materials and Activities

With respect to the availability and use of materials and the number and kinds of activities available in the school and classroom, the emphasis is on diversity. Consider for example the extremes--one curricular program (AAAS Science) with all the students undertaking an identical activity compared to an "endless" variety of curricular programs with each student undertaking a different activity. Another example--the same program and materials used day after day, year after year compared to the introduction of "new" programs and materials, or the media of instruction being the television receiver compared to an "endless" variety of media used. In these examples we have the extremes of least open to most open education.

Obviously, for most schools, the mid area of the range describes the materials and activities dimension. However, if one wishes to become "more open" in this dimension, the course of action is quite clear--a greater number and variety of programs, materials and activities should be introduced.

Dimension 3: Environment

If the key concept is potential for student choice, then in terms of physical environment we need to move towards greater flexibility and greater alternatives. This leads also to increasing the size of the space to permit

the expansion of schooling to include the entire community. If one defines the school to include the entire community (ideally, the world), then the choices are rather limitless--the classroom no longer becomes the box-like room, it becomes what then is necessary to explore learning for the individual student. Extreme examples might be (a) reading a book at a desk as compared to (b) interviewing a farmer on the topic of harvesting wheat.

The open area school facility can be considered the mid-range operationalization of this dimension. It permits and encourages flexibility of space and material and equipment arrangement, and movement beyond the desk toward a more extensive environment which includes (in some cases) all of the school building area. However, to extend openness in this dimension, one must go beyond the physical building and immediate grounds to include the community. Of course, this extension also includes the people in the physical environment--thus leading to increased human as well as physical resources.

Decision 4: Decision-Making Structure

Ideally, the structure for decision-making in the most open school is one of complete individual choice in all decisions. However, as in the case of all of the dimensions of schooling, the extreme is impossible and certainly, for most people, undesirable. Nevertheless, recognizing the obvious limitations, we can move considerably toward increasing student input into decision-making with respect to selection of teachers and students with whom they will work, to self-selection for grouping patterns based on interest, and to decisions related to choice of activities.

Moving from activity to activity, from individual to group activity, from one instructional area to another can be determined to a large extent by the individual student. This is more open than the teacher decision with respect to student participation in these activity.

Dimension 5: Time Scheduling

Schools that have set periods and bell systems to indicate a change from one activity or subject to another exemplify the less open education in this dimension. Examples of more open education are those that are characterized by (1) extensive independent study activities in which the student sets the objectives and the means by which the objectives will be reached, (2) the absence of prescribed periods of time for the activities, and (3) the flow of events determined by individual student interest.

This dimension, for many people (especially those at the secondary level and those in large schools), seems to be impossible to implement. As with the other dimensions, certain circumstances prevent extreme openness; nevertheless, movement in the intended direction is possible via several alternatives. For example, independent study can be introduced at any level of schooling, if one doesn't assume that it must be for all students, or it must be for all day, or it must be in all subjects, or it must be everyday. Independent study can be introduced for one or thirty students, for fifteen minutes or six hours, for one period a day or all periods, for one day a week or five days a week, and for one subject or all subjects. If the school seems too large to efficiently "schedule" student activities without a timetable, one could develop a "school within a school" and assign large blocks of time to a team of teachers with one hundred plus students--the alternatives are many.

Dimension 6: Individualization of Instruction

In more open education programs, individualization of instruction is interpreted to mean instruction which allows individual students to learn at their own rate and to follow methods of their own choosing. The antithesis is total group instruction directed toward the same rate for all the students

following the same method of instruction. Individualization of instruction, defined in another way, can also be considered a less open education program. For example, programmed instruction--the same materials and content for all students, allowing for varied rates of progress (e.g., IPI materials), would be a rather "closed" form of individualization of instruction. If accompanied by set periods of instruction with limitations on materials (incorporating more than one dimension), then the program becomes less open.

If we categorize individualization according to objective setting and instructional process (method), we find varying degrees of openness in programs, from the institutional prescribed objectives and methods to the student self-prescribed objectives and methods (see Figure 1).

FIGURE 1

INDIVIDUALIZED INSTRUCTION
(pace of instruction determined by the individual)

TYPE A — School-Determined Objectives

Individually diagnosed and prescribed
Behavioral objectives clearly specified
Defined systems of materials and methods of instruction

TYPE B — School-Determined Objectives

Main goal is pupil self-direction
Contract systems
Clearly stated curriculum goals
Well-equipped and developed learning resource centers
No preconceived sequence or system; the individual identifies the activities

TYPE C — Learner-Selected Objectives

Individual identifies personal learning objectives (student interests)
Directed program and specific materials provided

TYPE D — Learner-Selected Objectives

Independent study
Learner selects objectives and means to arriving at objectives

	School Objectives	Learner Objectives
Learner Methods & Activities	B	D
School Methods & Activities	A	C

Dimension 7: Composition of Classes

If we consider both vertical and horizontal forms of organization--vertical indicating the students progression through school, and horizontal indicating the grouping of students for instruction, then the nongraded, interest-based forms of organization are the most open. Nongraded vertical organization allows the student to progress at his own rate dealing with instruction at his own level--when he is ready for it, while interest-based grouping allows student choice to determine the instructional grouping pattern, rather than ability, age, maturity, or achievement (all of which reduce student choice or control). Nongraded vertical organization minimizes the categorization of curriculum by levels or grades; it de-emphasizes the forced relationship between curriculum and age or years of schooling; it avoids pre-judging success in school which stems from pre-judging the appropriate curriculum or rate of progress or achievement of the individual student. The objective for the teacher then is to find the appropriate "range of challenge" and provide for the form of individualization that is based on student interest.

Dimension 8: Role of the Teacher

If open programs are characterized by student choice, then the teacher must be available as responder, resource person, diagnostician, guider, stimulator, and advisor. Furthermore, this role is one that limits the teacher-pupil interaction primarily to the individual or small group. In an open education program the teacher spends much of her time preparing materials, developing the environment, identifying physical and human resources, and interacting with students as the need or problem arises or is identified.

In the less open program, the teacher is the director--selects the material, conducts (controls) the process, method, and extent of participation, and assigns the part to be played by each participant.

Others have tried to differentiate teacher roles in terms of teacher and student involvement in content and process. Open education is characterized by high teacher and student involvement and high teacher and student choice.*

Dimension 9: Student Evaluation

In open education programs evaluation serves one primary purpose--that of diagnosis. The student must be heavily involved (even responsible) in self-evaluation for the purpose of deciding what to do in school. Obviously, the student can't do it alone--we learn about self through others. Therefore, the more input provided from all sources (self, peers, teachers, parents) in the form of assisting in diagnosis and treatment, the better the decision the student can make in deciding what to do.

Formal evaluation, for purposes of control, is not a part of more open programs. Standardized evaluations based on content coverage are of little diagnostic value. Continuous individualized evaluation which has involved students in both planning and implementation is consistent with basic assumptions of open education.

Dimension 10: Student Control

Rules can originate from several levels within the organization. Some are handed down; others are developed through consensus by peers; still others are developed through cooperative arrangement and agreement by representatives of all levels. In open education, ideally, all roles emerge after students have had meaningful involvement in the decision development process and are given responsibility for enforcement. The greater the reliance on super-ordinate authority--teacher, principal, superintendent, board of trustees, the

* Bussis, Anne M. and Chittenden, Edward A. Analysis of an Approach to Open Education, Princeton, N.J.: Educational Testing Service, 1970.

less open the program. The question is not of the extent of freedom (do your own thing); rather the extent of involvement by students in the rule setting of the school and classroom environment.

Summary

Open education is education that maximizes student choice in all dimensions of schooling. The extent of openness falls along a continuum; high openness is characterized by high (1) individualization of instruction, (2) student independence, (3) environmental flexibility, (4) nongradedness, (5) flexibility of student evaluation, and (6) flexibility of curricular programs.

C. Assumptions of Open Education

Three sets of assumptions--Barth, Rogers, and Tannenbaum and Davis* have implications for open education. These assumptions are useful in assisting teachers and principals in developing a philosophic basis for open education and identifying those changes necessary in operationalizing these assumptions in everyday classroom practice. Figure 2 provides the list of Barth's assumptions and examples of the implications developed by participants in one of the inservice open education workshops. Figures 3 and 4 provide similar examples for the assumptions of Rogers and Tannenbaum and Davis. This approach to the development of an open education philosophy leads to practical alternatives that can be implemented by the staff of any school.

FIGURE 2

Implications of Barth's Assumptions On Open Education

Assumptions

1. Children are innately curious and display exploratory behaviour quite independent of adult intervention.
   -create interest centres to provide for an exploratory period
2. Exploratory behaviour is self-perpetuating.
   -provide unstructured time
3. The child will display natural exploratory behaviour if he is not threatened.
   -remove "right and wrong" controls from exploratory behaviour

* R. S. Barth, "Open Education Assumptions About Learning," Educational Philosophy and Theory, 1969 1 (2), 29-39; C. R. Rogers, "The Facilitation of Significant Learning," Instructions: Some Contemporary Viewpoints, ed. by L. Siegel, San Francisco: Chancellor Publishing, 1967, 41-43; and R. Tannenbaum and S. A. Davis, "Values, Man, and Organizations," Behavioral Science and the Manager's Role, W. Eddy, W. Burke, V. Dupre, and O. South, editors, NTL Institute for Applied Behavioral Science, 1969, 3-24.

4. Confidence in self is highly related to capacity for learning and for making important choices affecting one's learning.

   -provide positive reinforcement for behaviour based on student choice of activity

5. Active exploration in a rich environment, offering a wide array of manipulative materials will facilitate children's learning.

   -provide extensive variety of alternative materials

6. Play is not distinguished from work as the predominant mode of learning in early childhood.

   -use all activity as learning experiences

7. Children have both the competence and the right to make significant decisions concerning their own learning.

   -permit greater individual student choice in activities

8. Children are likely to learn if they are given considerable choice in the selection of the materials they wish to work with and in the selection of the questions they wish to pursue with respect to those materials.

   -permit greater individual student choice in selection of method and materials

9. Given the opportunity, children will choose to engage in activities which will be of high interest to them.

   -base curriculum alternatives on student interest

10. When more than one child is interested in exploring the same problem or the same materials they will often choose to collaborate in some way.

    -encourage collaboration instead of competition via more team activities

11. When a child learns something which is important to him he will wish to share it with others.

    -use students as resource persons for other students

12. Concept formation proceeds very slowly.

    -use varied methods to introduce each concept

13. Children learn and develop intellectually not only at their own rate, but in their own style.

    -use varied styles of teaching, geared to student learning style

14. Children pass through similar stages of intellectual development...each in his own way, and at his own rate and in his own time.

    -individualize program for varying rates of progress

15. Intellectual growth and development takes place through a sequence of concrete experiences followed by abstraction.

-use concrete experiences to reinforce abstract experiences

16. Verbal abstractions should follow direct experience with objects and ideas, not precede them or substitute for them.

-use concrete experiences prior to verbalizing experiences

17. The preferred source of verification for a child's solution to a problem comes through the materials he is working with.

-use evaluation by observation

18. Errors are necessarily a part of the learning process; they are to be expected and even desired for they contain information essential for further learning.

-use continuous evaluation as continuous diagnosis of all behaviour

19. Those qualities of a person's learning which can be carefully measured are not necessarily the most important.

-de-emphasize formal written evaluation as sole measure of performance

20. Objective measures of performance may have a negative effect upon learning.

-use self-evaluation program for diagnosing student needs and achievement

21. If an individual is involved in and having fun with an activity, learning is taking place. Evidence of this learning is best assessed intuitively, by direct observation.

-encourage student choice in activities

22. The best way of evaluating the effect of the school experience on the child, is to observe him over a long period of time.

-avoid formal evaluation as sole assessment program

23. The best measure of a child's work is his work.

-evaluate student products

24. The quality of being is more important than the quality of knowing; knowledge is a means of education not its end. The final test of an education is what a man <u>is</u> not what he <u>knows</u>.

-emphasize the affective objectives of schooling

25. Knowledge is a function of one's personal integration of experience and therefore does not fall into neatly separate categories or "disciplines".

-emphasize integrated studies approach to curriculum

26. The structure of knowledge is personal and idiosyncratic, and a function of a synthesis of each individual's experience with the world.

-build on a student's previous experience

27. It is questionable whether there is a minimum body of knowledge which is essential for everyone to know.

-build the program on student choice

28. It is possible, even likely, that an individual may learn and possess knowledge of a phenomenon and yet be unable to display it publicly. Knowledge resides with the knower not in its public expression.

-use unobtrusive measures as part of the evaluation program

FIGURE 3

Implications of Rogers' Assumptions of Open Education

Assumptions

1. Human beings have a natural potentiality for learning.

   -treat all experiences as learning experiences

2. Significant learning takes place when the subject matter is perceived by the student as having relevance to his own purposes.

   -have pupils and teachers plan curricular activities

3. Much significant learning is acquired through doing.

   -emphasize physical involvement and direct contact with people and things whenever possible

4. Learning is facilitated when the student participates responsibly in the learning process.

   -increase independent study programs at all levels of schooling

5. Self-initiated learning, involving the whole person of the learner--feelings as well as intellect--is the most pervasive and lasting.

   -create an environment and set of experiences relevant to the needs and interests of the students

6. Creativity in learning is best facilitated when self-criticism and self-evaluation are primary, and evaluation by others is of secondary importance.

   -implement self-evaluation program for disgnosing student needs and achievement

7. The most socially useful learning in the modern world is the learning of the process of learning, a continuous openness to experience, and incorporation into onself of the process of change.

   -emphasis on skill development (independent study, group, and social skills)

FIGURE 4

Implications of Values in Transition

Assumptions

1. Away from avoidance or negative evaluation of individuals toward confirming them as human beings.

   -provide positive reinforcement instead of negative reinforcement

2. Away from a view of individuals as fixed, toward seeing them as being in process.

   -avoid stereotyping students because of a fixed, point-in-time data base (e.g., test, previous record)

3. Away from resisting and fearing individual differences toward accepting and utilizing them.

   -avoid instruction directed toward conformity in methods or outcomes

4. Away from walling-off the expression of feelings toward making possible both appropriate expression and effective use.

   -create environment which encourages open communication via all effective modes of expression

5. Away from distrusting people toward trusting them.

   -emphasize positive and high expectations of others in the teaching process

6. Away from avoidance of risk-taking toward willingness to risk.

   -create environment which minimizes "failure" as negative

7. Away from a view of process work as being unproductive effort toward seeing it is essential to effective task accomplishment.

   -emphasize process as important as outcomes

8. Away from a primary emphasis on competition toward a much greater emphasis on collaboration.

   -encourage group collaboration (team work) rather than individual vs. individual competition

D. A Way of Assessing the Extent of Openness in a Classroom and School

The following instrument was developed to assess the extent of openness of educational program. However, it also serves another purpose. By assessing the present state of openness and identifying the intended or ideal state of openness, one then can identify the areas of change needed to increase the openness of program in one's classroom and school. For example, if a teacher indicates that her present classroom is graded (dimension XXI) and indicates that she wants to open the vertical organization aspects of the program, then it becomes obvious that to become more open in that dimension, she must nongrade the program--this then becomes the focus of the change. If this is the consensus of the teachers in a school or part of a school, then the principal and staff have identified an area for major study and change leading to a more open education program for their school.

OPEN EDUCATION

A Definition of Open Education

Open education may be defined as education that maximizes student choice in all dimensions of schooling. In this document, 29 dimensions have been identified which can be summed to describe the degree of open education evident in a school or classrroom (teaching area).

DIMENSIONS OF SCHOOLING*

Directions

Please respond to each of the statements in the following manner:

1. In the column titled ACTUAL (left-hand column titled "Rank"), rank from 1 to 4 (or 5) the alternatives of each dimension which best describe the present situation in your classroom (teaching area). The intent is to describe your classroom on each of the dimensions. For each dimension place one number opposite each alternative, with "1" signifying the response which is <u>most</u> representative of your school and/or teaching area and "4" (or "5") signifying the response which is <u>least</u> representative.
2. In the column titled IDEAL (left-hand column titled "Rank"), check (✓) the one alternative which best describes the situation you believe <u>to be ideal</u>. The intent is to describe your perception of the ideal school in terms of the dimensions of schooling.

PLEASE READ <u>ALL</u> OF THE CHOICES FOR EACH DIMENSION BEFORE RESPONDING.

Thank you for your cooperation.

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* Adapted from R. Traub, J. Weiss, C. Fisher, and D. Musella, "Closure On Openness: Describing and Quantifying Open Education," <u>Interchange</u>, Vol. 3, Nos. 2-3, 1972, pp. 69-84.

I. ASSIGNMENT OF STUDENTS TO TEACHERS (This section is concerned with who makes the decisions about student assignment to teachers.)

	ACTUAL		IDEAL	
	Rank	Score	Rank	Score
1. Class lists are decided upon by teachers and students.				
2. Class lists are decided upon by the teachers.				
3. Class lists are made up by the teachers and principal or vice principal.				
4. Class lists are made up by the principal and/or vice principal.				

II. HORIZONTAL ORGANIZATION (This section is concerned with the number of teachers a student "sees" in a day.)

	ACTUAL		IDEAL	
	Rank	Score	Rank	Score
1. A "home room" teacher teaches all subjects.				
2. A "home room" teacher teaches most subjects.				
3. A "home room" teacher teaches for approximately half the day with rotary for the other half.				
4. A full rotary system is employed.				

III. TIME STRUCTURE (This section is concerned with the organization of school time.)

	ACTUAL		IDEAL	
	Rank	Score	Rank	Score
1. Fluid pattern--loose organization of changing activities that students follow if they choose to, but on their own time.				
2. Structured and nonstructured--approximately one-half-day highly organized and one-half-day relatively unstructured.				
3. Mostly structured but some unstructured situations during the day.				
4. Highly structured--school time organized into periods, no allowance for unstructured situations.				

IV. UNSTRUCTURED TIME (This section concerns the amount of time per day during which students are free to pursue their own interests. Unstructured time does not include recess or independent study, e.g., students' work on projects independent of class objectives or programs.)

1. More than one hour of unstructured time is scheduled.
2. One hour of unstructured time is scheduled.
3. One half hour of unstructured time is scheduled.
4. No unstructured time is scheduled.

ACTUAL		IDEAL	
Rank	Score	Rank	Score

V. RULE MAKING (This section is concerned with who makes the rules which govern non-academic matters.)

1. Rules for student conduct are made by students alone.
2. Rules for student conduct are made by individual teachers and their students.
3. Rules for student conduct are made by administrative staff, teaching staff, and students.
4. Rules for student conduct are made by the administrative staff and the teaching staff.
5. Rules for student conduct are made by administrative staff.

ACTUAL		IDEAL	
Rank	Score	Rank	Score

VI. AVAILABILITY OF CURRICULUM PROGRAMS (This section is concerned with the range of programs available in the school from which materials for the curriculum may be chosen, for example reading series and mathematics texts.)

1. There are four or more very diverse programs from which to choose.
2. There are a few (e.g., two or three) very diverse programs from which to choose.
3. There are a few (e.g., two or three) very similar programs from which to choose.
4. Only one program is available.

ACTUAL		IDEAL	
Rank	Score	Rank	Score

VII. MATERIALS USAGE (This section is concerned with the changes in materials over the last two years.)

1. Continual tryout of new materials with almost no use of established materials.
2. More than half of the materials used are new but some established materials are kept.
3. Both established and new materials are used in about equal proportions.
4. Most of the curriculum materials have been in use for several years with a few modifications being introduced each year.
5. All the curriculum materials in this subject have been in use in the school for several years.

ACTUAL		IDEAL	
Rank	Score	Rank	Score

VIII. SELECTION OF MATERIALS (This section is concerned with the selection of materials for students generally.)

	ACTUAL		IDEAL	
	Rank	Score	Rank	Score
1. Student chooses for himself from among all the materials available.				
2. Student chooses from alternatives offered to him by the teacher.				
3. Student is assigned materials prescribed for him individually (different materials for each individual.)				
4. Student is assigned materials prescribed to members of his sub-group of the class. (Same materials for all students in the same sub-groups; different materials for each sub-group.)				
5. Student is assigned materials prescribed to all members of his class. (Same materials for all students in the same class.)				

IX. LEARNING ENVIRONMENT (This section is concerned with the degree to which the environment is used in the instructional program.)

	ACTUAL		IDEAL	
	Rank	Score	Rank	Score
1. The learning environment consists of the entire community; study and related learning experiences and integrated with the community.				
2. The learning environment consists of selected aspects of the community (e.g., museum), with most of study and related learning experiences in the school.				
3. The learning environment consists of the entire school; study and related learning experiences take place beyond the classroom area.				
4. The learning environment consists of the classroom; study and related learning experiences take place in a number of different centers within the classroom area.				
5. The learning environment consists primarily of the student's desk or table.				

X. DECISION-MAKING (This section is concerned with how decisions are made in the classroom, generally.)

	ACTUAL		IDEAL	
	Rank	Score	Rank	Score
1. The student decides what he will do.				
2. The teacher and student cooperatively make the decisions about what the student will do.				
3. The teacher makes decisions about student activities in the classroom.				
4. Classroom activities are directed by external authority (e.g., principal, area superintendent).				

XI. MEDIA USAGE (This section concerns the range of teaching aids used in instruction.)

	ACTUAL		IDEAL	
	Rank	Score	Rank	Score
1. Teacher, textbook, and audio visual aids are augmented by media requiring physical involvement of the students, (e.g., programmed instruction, games, and role playing).				
2. Teacher and textbook are aided by media requiring minimal physical involvement of the student, (e.g., films, records, radio, and television).				
3. The teacher and textbook are the media of instruction.				
4. The teacher is the sole medium of instruction.				

XII. TEACHER FOCUS (This section concerns the size of the student group addressed by the teacher at one time.)

	ACTUAL		IDEAL	
	Rank	Score	Rank	Score
1. Teacher directs attention to individual students.				
2. Teacher directs attention to sub-groups of the class.				
3. Teacher directs attention to the class as a whole.				
4. Teacher directs attention to more than one class at a time.				

XIII. TEACHER ROLE (This section concerns the part the teacher plays in the student's contact with what is being learned.)

	ACTUAL		IDEAL	
	Rank	Score	Rank	Score
1. The teacher acts as a resource person.				
2. The teacher acts as a discussion leader on topics initiated by the student.				
3. The teacher acts as a discussion leader on topics of his/her choice.				
4. The teacher acts as a presenter of planned lessons.				

XIV. STUDENT METHODS (This section is concerned with the process of arriving at student methods of learning.)

	ACTUAL		IDEAL	
	Rank	Score	Rank	Score
1. Student formulates his own methods of learning.				
2. Student chooses from alternative methods offered by the teacher.				
3. Student is assigned a method prescribed for him individually.				
4. Student is assigned a method prescribed for members of his sub-group of the class.				
5. Student is assigned a method prescribed to all members of his class.				

XV. PACE OF MATERIALS (This section is concerned with the pace at which materials are to be studied.

	ACTUAL		IDEAL	
	Rank	Score	Rank	Score
1. Student prescribes the pace for himself.				
2. Student works at a pace prescribed for him individually.				
3. Student is expected to work at a pace set for the members of the sub-group of the class.				
4. Student is expected to work at the pace set for all members of the class.				

XVI. ATTENDANCE (This section is concerned with students' physical presence at activities.)

	ACTUAL		IDEAL	
	Rank	Score	Rank	Score
1. Attendance to activities of each class is optional.				
2. Attendance to less than half of the activities of each class is required.				
3. Attendance to more than half of the activities of each class is required.				
4. Attendance to all activities of each class is required.				

XVII. INDEPENDENT STUDY TIME. (This section concerns the amount of time scheduled weekly for independent study; e.g., student's work on projects independent of class objectives of programs.)

	ACTUAL		IDEAL	
	Rank	Score	Rank	Score
1. More than three hours are provided weekly.				
2. One to three hours are provided weekly.				
3. One hour is provided weekly.				
4. No independent study time is provided.				

XVIII. SUB-GROUPING CRITERION (This section is concerned with the criteria for developing sub-groupings within class generally.)

	ACTUAL		IDEAL	
	Rank	Score	Rank	Score
1. Students are grouped according to their interests.				
2. Students are grouped randomly (e.g., alphabetic distribution).				
3. Students are grouped by social and physical maturity.				
4. Students are grouped by achievement or aptitude.				
5. Students are not grouped.				

XIX. NUMBER OF STUDENT GROUPS (This section concerns the number of student groups there are in your classes.)

	ACTUAL		IDEAL	
	Rank	Score	Rank	Score
1. Students work individually.				
2. Students work in four or more groups.				
3. Students work in three groups.				
4. Students work in two groups.				
5. Students work in two groups.				

XX. RANGE OF AGE (This section is concerned with the range of age of the students in your classes.)

	ACTUAL		IDEAL	
	Rank	Score	Rank	Score
1. The students differ in age by more than three years.				
2. All students are in a three year age range.				
3. All students are in a two year age range.				
4. All students are the same age.				

XXI. VERTICAL ORGANIZATION (This section concerns the identification of the promotion structure in which you teach.)

	ACTUAL		IDEAL	
	Rank	Score	Rank	Score
1. Nongraded--provision is made for differentiated rates of progress according to individual needs.				
2. A levels system is in use--a number of levels are specified in skill subject areas (e.g., 16 reading levels.)				
3. A unit system is in use (e.g., K-6 grade years divided into 18 units which are progressive in terms of students achievement.)				
4. A graded system is in use--provision is made for similar content and rates of progress according to grade level.				

XXII. CRITERION FOR PROMOTION (This section is concerned with the criteria used in making placement decisions.)

	ACTUAL		IDEAL	
	Rank	Score	Rank	Score
1. The most important criterion is chronological age.				
2. The most important criterion is physical or social maturity.				
3. The most important criterion is achievement.				
4. The most important criterion is intelligence.				

XXIII. PROMOTION TIMING (This section concerns when class or grade placement of students occurs.)

	ACTUAL		IDEAL	
	Rank	Score	Rank	Score
1. Placement decisions are made whenever it seems appropriate for the individual student.				
2. Placement decisions are made at the end of each unit of study.				
3. Placement decisions are made at the end of each term.				
4. Placement decisions are made at the end of the school year.				

XXIV. DEFININING OBJECTIVES (This section is concerned with who specified the objectives.)

	ACTUAL		IDEAL	
	Rank	Score	Rank	Score
1. Objectives are defined by students alone.				
2. Objectives are defined by teacher and students together.				
3. Objectives are defined by the teacher.				
4. Objectives are defined by the curriculum materials.				
5. Objectives are defined by the system (school board, central administration, principal) for the whole school.				

XXV. USE OF OBJECTIVES (This section is concerned with the extent to which objectives are developed for the individual student or for groups of students.)

1. Objectives are developed for each student individually.
2. The same objectives are used for all students in a subgroup of the class.
3. The same objectives are used for all students within the class.
4. The same objectives are used in all classes in your school.

ACTUAL		IDEAL	
Rank	Score	Rank	Score

XXVI. EVALUATION AUDIENCE (This section is concerned with how the evaluation procedures are used.)

1. Evaluation procedures are different for each student in the class.
2. Evaluation procedures are the same for each student within a sub-group within the class, but differ from sub-group to sub-group.
3. Evaluation procedures are the same for all students in your class, but different from class to class in the school.
4. Evaluation procedures are the same for all students in the school.

ACTUAL		IDEAL	
Rank	Score	Rank	Score

XXVII. TIMING OF EVALUATION (This section is concerned with the times at which the evaluation takes place.)

1. Evaluation takes place daily.
2. Evaluation takes place at even less frequent intervals, e.g., weekly.
3. Evaluation takes place at less frequent intervals, e.g., monthly.
4. Evaluation takes place at a few specified intervals during the year.

ACTUAL		IDEAL	
Rank	Score	Rank	Score

XXVIII. STUDENT ROLE IN EVALUATION (This section is concerned with the degree to which the student plans how the evaluation is to take place, i.e., developing procedures, collecting and analyzing data and making judgments.)

1. Students have sole responsibility for planning and implementing evaluation procedures.
2. Students have most of the responsibility for planning and implementing evaluation procedures.
3. Students and teacher participate equally in planning and implementing evaluation procedures.
4. Students participate minimally in planning and implementing evaluation procedures.
5. Students have no role in planning and implementing evaluation procedures.

ACTUAL		IDEAL	
Rank	Score	Rank	Score

XXIX. EVALUATION PROCEDURES (This section concerns the types of tests and other evaluation instruments used in student evaluation.)

1. No formal tests are used; evaluation is based on work samples and anecdotal reports.
2. Evaluation instruments used are developed by the teacher.
3. Standardized instruments are used (rather equally with teacher-developed evaluation instruments).
4. Standardized (commercial) instruments are used.

ACTUAL		IDEAL	
Rank	Score	Rank	Score

SCORING PROCEDURES FOR DIMENSIONS OF SCHOOLING

Actual

Sample Item

A. 1. _____

2. _____

3. _____

4. _____

Actual

Ranking	Score
4	
3	
1	3
2	

1. Write the corresponding item number in the right hand (Score) column opposite the first position ranking.

2. Sum the scores taken from the Score column for all 29 items.

Ideal

Sample Item

B. 1. _____

2. _____

3. _____

4. _____

Ideal

Choice	Score
✓	2

1. Write the corresponding item number in the right hand (Score) column opposite the (✓) check mark for the choice selected.

2. Sum the scores taken from the Score column for all 29 items.

E. EVALUATION OF THE OPEN EDUCATION PROGRAMS

Purpose of Evaluation:

1. To provide information on how well the purposes of the open education programs are being achieved.

2. To test assertions or hypotheses underlying the open education programs.

3. To provide feedback for improving practices in the open education programs.

4. To provide a basis for expanding open education programs.

5. To provide psychological security to staff, pupils, parents and school officials.

Evaluation as Hypotheses Testing

Evaluation of any or all aspects of open education can be implemented by any school personnel. Since at the classroom, school, or even school district level, one is not necessarily attempting to conduct research which for generalizability to all classrooms, all schools, and all school districts, then the rigorous methods of the professional evaluators are not essential.

At the classroom level, one is interested in how well it works in order that we can make the best decision (since a decision must be made in any case). Evaluation or hypothesis testing can be applied to any change you wish to make. Hypothesis testing means making certain predictions (educated guess) on what the change will lead to. Therefore, one first develops a rationale that allows one to predict what will happen as a result of the change.

The following list of hypotheses relating directly to pupils serve as examples of predicted outcomes.

1. Pupils in the open education programs will become more self-directed learners than pupils in conventional programs.

2. Pupils in the open education programs will have fewer and/or less intense social and psychological problems than pupils in conventional programs.

3. Achievement of pupils in the open education programs on standardized tests will equal or exceed that of pupils in conventional programs.

4. Pupils in the open education programs will have more favourable attitudes toward school than will pupils in conventional programs.

5. Pupils in the open education programs will hold more adequate 'self concepts' than will pupils in conventional programs.

6. The average daily attendance of pupils in the open education programs will exceed the attendance of pupils in conventional programs.

7. Pupils in the open education programs will show a greater increase in measures of creativity than will pupils in the conventional programs.

The following list of hypotheses relate directly to teachers:

8. Teachers in the open education programs will experience a higher degree of professional fulfillment and self-satisfaction than teachers in conventional programs.

9. Teachers in the open education programs will utilize a greater variety of learning media than will teachers in conventional programs.

10. Teacher turnover will be lower in the open education programs than in conventional programs.

11. Teachers in the open education programs will be more open to change than will teachers in conventional programs.

Source of Tests

Taking any aspect of open education that one wishes to change, one first develops the rationale, then the hypotheses, and then the means of collecting data at certain time intervals -- before, during, and after the change has been implemented. Data can be collected by means of tests already developed or questionnaires which can be developed to "fit the situation" or by interviews. Obviously the data should be collected from those involved directly or indirectly with the element change.

Although the rigor of this "home style" approach to evaluation can be questioned in terms of applicability and generalizability to other environments and personnel, it offers a basis for support in terms of the objectives listed above and in terms of decisions related to the ongoing operation of the classroom, school, and school district.

SECTION II

Open Area Schools and Open Education

In this section the results of two workshop-conferences conducted by the project team for teachers and principals in open area schools are presented. In order to obtain information related to the activities and programs of open area schools, sixty principals and sixty teachers were selected to participate in a two-day workshop (one for principals and one for teachers). These people were selected by the project team, in cooperation with directors, consultants, and ministry personnel, on the basis of (1) known expertise and experience in open area schools, and (2) knowledge and understanding of the basic philosophy of open education. The following sections represent summary information collected from the participants regarding the advantages, problems, problem solutions, and future intended changes in open area schools.

Advantages of Open Area Schools*

1. Promotes unity of both student body and teaching staff.
2. Less need for supply teachers.
3. Closer to reality of the world outside the school than the limited experience in a self-contained classroom.
4. Have opportunity to make best use of staff.
5. Facilitating flexible grouping of students.
6. Physical Facilities: e.g. --aesthetic appeal
   --kinds of space available to students (i.e., availability of variety of interest areas)
   --flexibility (student movement)
   --easier access to resources, teaching aids, apparatus, and teachers
   --greater economy of pupil movement

* Since the results were arrived at through consensus in small group activity, there is some overlapping of concepts. No attempt was made to order these in any priority.

7. Conducive to team teaching.

8. Reduction in parental problems when there is a team responsible for a student (child) rather than a single adult.

9. Principal gets to know more pupils because he has more contact with them in an open area.

10. Easier to cover for absent teachers.

11. Psychological advantage to students, (e.g., he is not singled out as being behind the rest of the class).

12. Social advantages to students (they mix with many more children and with more teachers).

13. Open area encourages self discipline among the students.

14. Open area lends itself more to a community spirit (among students, teachers, and principal).

15. Conducive to professional growth of teachers (they mix more with their fellow teachers).

16. More sociability among staff members.

17. Social Advantages:
    --greater facility for more social interaction between children--teachers, children--children
    --multi-age grouping--socially, academically, emotionally

18. Children in open area schools generally have fewer problems--socially, emotionally.

19. Easier to regroup students, teachers.

20. More difficult for the teacher to dominate the student; student encouraged to develop self-direction.

21. Student is exposed to more resources re: teachers, other students, physical resources, watching teachers interact.

22. Students seem to be happier.

23. Changes the type of discipline problems faced by the teacher; there is more concern with problems involving outside school events than within-school problems.

24. Greater scope for social development of child; greater opportunity for increasing interrelationships:
    --different ages and levels
    --behaviour is modified by peer groups
    --greater opportunity for development of self-discipline
    --greater response to internal controls

25. Flexibility of grouping and learning activities--groups can vary in size and according to task at hand, variety of roles available to all students, rapid mobility--groups can restructure themselves quickly.

26. Pooling of all resources--human and materials--ready access to all.

--demands some responsibility on part of students for maintenance of materials
--teaches students to share
--better utilization of time

27. Utilization of teacher strengths to advantage.

--grouping and re-grouping permits better use of teacher capabilities
--teachers can exercise leadership in areas of strength
--roles shift as activities change

28. Daily on-the-job in-service and professional growth for teachers.

--teachers learn from one another
--idea exchange
--security and confidence increase as teachers grow in the program

29. Sharing relationship and responsibility for teachers and students.

--all teachers are responsible for development of students
--teachers exchange ideas and insights regarding students
--teacher time more flexible for freeing teachers for various purposes

30. Students learn internal controls and responsibility for their behaviour.

31. Family atmosphere develops; greater empathy among teachers, among students, among teachers and students.

32. Less chance of teacher-student conflict; student can relate to other teachers.

--teacher benefits from other teachers' observations of student
--more realistic evaluation of student growth and development

33. Teachers tend to act more rationally and professionally.

34. Students can seek out most compatible teacher in a team.

35. "Bad actors" seem to be less prevalent; more difficult to be a discipline problem because of more potential supervision, group pressure.

36. In properly designed setting, it is easier for a student to be alone without being singled out.

37. If properly designed and utilized, resource center is more usable.

Identification of Problems (Principals)*

Community	1.	Selling the concept and gaining real commitment from school trustees, senior administrators, community, Department of Education, and teachers.
Philosophy	2.	Conflict created by divergence between the system's present philosophy and organizational structure and one consistent with open education.
Facilities	3.	Inadequate, inappropriate, inefficient, and/or ineffective use of the facilities.
Curriculum	4.	Development of open education curricular program with continuous progress and the individualization of instruction.
Staffing	5.	Selection of most effective teachers for open education
Teacher Inservice	6.	Developing and implementing appropriate inservice programs for improving teaching in an open area school.
Cooperative Efforts	7.	Developing greater cooperation and coordination among all staff members.
Personal Relationships	8.	Developing a healthy climate for teacher-student-principal personal relationships.
Students	9.	Developing a student-centered school, one that emphasizes the solution of student problems related to learning and development in an open area school.
Daily Operations	10.	Dealing with daily operations related to noise level, planning time, the number of visitors, and other regularly occurring problems.

* These are ranked in order of importance.

Identification of Problems (Teachers)*

Daily Operations	1.	Dealing with daily operations at the classroom level (e.g., planning time, programming special subjects, noise control, teacher workload, large number of students, student control).
Students	2.	Developing a program that accommodates all students, especially those that need special consideration.
Facilities	3.	Making full use of the large area, effectively and efficiently.
Curriculum	4.	Developing a program and a form of program organization that has the greatest potential for success in meeting the individual needs, ability and interest of all the students.
Inservice	5.	Need for more adequate inservice and pre-service programs for improving teaching in open area schools.
Staffing	6.	Selecting the most effective teachers for open area schools using teacher input as part of the selection process.
Community	7.	Educating the total community especially parent and administrator, on the meaning of the concept open area (education); convincing the community of its value.
Philosophy	8.	Arriving at a common philosophic position on the concept of open area schooling and its purpose (among teachers as well as between teachers-principals and teachers-parents).
Evaluation	9.	Developing and implementing a comprehensive, yet appropriate evaluation program.
Cooperation	10.	Developing a cooperative "team" effort among all staff members in a school.
Personal Relationships	11.	Developing a climate characterized by warm, human relationships among teachers.
Administration-Organization	12.	Improving conditions administratively and organizationally (e.g., timetabling, alternatives in staffing, resources acquisition and use).

* These are ranked in order of importance.

Problem Solution

1. Day-to-Day Operations

Re finding time for planning:

-free team by timetabling special classes to free whole team; e.g., Home Economics, French, Shop, Physical Education, Music
-environmental studies school for the system. Pupil groups fed into school for half-day on a 6-day cycle; frees whole team
-use of administrators to handle whole group
-use of teams, such as prospective consultants, V.P., Principal--and rotate around schools. Frees teams for half-day
-use parents, teacher college students

Re distractions:

-teach similar subjects at same time
-use activity or interest centres
-multi-age grouping
-use some form of reward system (e.g., Play money given for good behaviour and used by students to bid on interest activities)
-soft music
-mental health days

2. Students

-provide study carrels or seminar rooms for pupils not able to adapt to open class
-provide special classes
-partial integration (interest areas)
-use of resource teacher for environmental studies
-special skills by teacher in special class
-total segregation (joining for Physical Education)
-provision of special teacher in one team to work constantly with children
-students who can't cope transfer to alternate (non-open) school
-more program materials

Re grouping of pupils:

-core interest timetable
-grouping Hi and Lo ability groups in core area
-emphasis on individual program for each child
-organize pupils into House groups; divide for core areas
-put slow learners in self-contained classrooms
-more structured lessons
-putting Grade 6 pupils to work with Grade 4 pupils, etc.
-cut down size of group (if possible) (23 agreed on as critical number)

3. Facilities

-teachers who work in them should help plan them

4. Curriculum

-define clearly skills, concepts, areas of concern
-teachers must discuss and establish basic aims and objectives
-plan for integration and correlation of subject matter;

First Year: Division of school into curriculum
Second Year: Individualized timetable
Third Year: Three teachers in one house responsible for all subject areas, working as a team

-use of pre-packaged material (e.g., Addison-Wesley--IPI--continuous progress laboratory)
-interest areas organized by themes, with alternate weekly change to provide time (6-day cycle)
-more program materials

5. Inservice

-training in interpersonal relations
-common interchange of problems and solutions

6. Staffing

-policy must be flexible
-teachers should participate in hiring if the person is to be a member of a team
-open minded staff
-teachers should have more appropriate training in Teachers' Colleges
-should plan a school further ahead with more careful selection of staff

7. Community

-invite community to see school during day
-have parents participate in some aspect of program
-allow parents some element of choice as to school attended

8. Evaluation

-anecdotal ways of marking and a check list format
-establish program evaluation

9. Cooperation

-keep lines of communication open and honest
-permit teachers to form teams

10. Personal Relations

-screen staff, select superior teachers who are committed and willing to do more than their share
-training in interpersonal relations
-discuss problems honestly
-principal could arbitrate at a group meeting
-sensitivity of principal to school climate

Intended Direction of Change Toward Open Education (Principals)

A summary of the answers related to the direction of intention may be categorized into the following areas:

Curriculum, Objectives, Evaluation, Decision-making, Program Organization, Instruction and Methodology, and Learning Environment.

Curriculum:
- -greater diversity of materials
- -continued introduction of new materials
- -greater diversity of media and greater use of media
- -development, selection, and assignment of materials geared to the individual (rather than all students in a subgroup for the class working with the same materials)

Objectives:
- -greater involvement of teachers and students in defining objectives
- -greater emphasis on objectives unique to the individual student
- -greater emphasis on communication, numeracy, and problem-solving skills

Evaluation:
- -evaluation as a continuous, daily process geared to each student in terms of his achievement and physical and social maturity
- -greater use of standardized instruments as well as teacher-developed assessment devices
- -greater emphasis on teacher-student cooperative participation in planning implementating evaluation procedures

Decision-making:
- -greater student involvement in decision concerning rules of conduct, selection of curriculum materials, student assignment to teachers (classes), and the pace at which materials are to be studied

Program Organization:
- -less emphasis on the self-contained classroom
- -greater emphasis on a combination form of horizontal organization and structured and unstructured time
- -greater variety of subgrouping criteria--achievement, interests, social and physical maturity (with emphasis still on achievement), more use of independent study and unstructured time
- -greater use of multiage grouping with a 3 or 4 year age spread in any one class

Instruction & Methodology:
- -greater teacher focus on the individual student
- -greater emphasis on the teacher role as a discussion leader and resource person in dealing with topics generated by the student
- -greater use of student choice of materials and the pace of study

Learning Environment:
- -extension of the learning environment from the classroom and school to the entire community

Intended Direction of Change Toward Open Education (Teachers)

A summary of the answers related to the direction of intention may be categorized into the following areas:

Student, Horizontal Organization, Timetabling, Curriculum, Teacher, Objectives, Vertical Organization, and Evaluation.

Student: Decentralization of decision-making to include greater student input in student assignment to teachers; rules which govern non-academic matters; selection of materials and methodology of instruction; decisions related to classroom activities; selecting the pace at which materials are to be studied; attendance to classroom activities; planning how evaluation is to take place.

Horizontal Organization: Less use of full rotary and self-contained classrooms; greater use of a combination of both; greater use of independent study; more emphasis on student interest as part of the criteria for the subgrouping of students within the class; greater emphasis on the individual and less on student groupings; greater emphasis on multiage grouping across class lines; less emphasis on achievement as the criteria for sub-grouping within the class.

Timetabling: Greater emphasis on fluid patterns for the scheduling of activities, and on nonstructuring (no bells or rigid timetables); greater use of unstructured time; greater use of independent study time.

Curriculum: Greater number of available curricular programs; emphasis on the introduction of new materials; emphasis on materials geared to the individual and/or small group; emphasis on the use of a greater variety and a greater number of different forms of media; school environment (in terms of curriculum integration) moving away from the classroom to the inclusion of the entire community.

Teacher: Teacher focus directed more to the individual student and less on the classroom as a whole; teacher role more of a resource person and leader of discussion groups based on student-selected topics, rather than a presenter of planned lessons.

Objectives: Greater teacher-pupil cooperative efforts in selecting and defining objectives; development of objectives related to the individual student rather than to the entire class or school.

Vertical Organization: More emphasis on continuous progress and a levels system; (the abolishment of a graded system); criteria for vertical movement (promotion) consists of physical and social maturity, age, and achievement, with emphasis on achievement; vertical movement of students when it is appropriate to the individual student, rather than at the end of the year, term, or unit.

Evaluation: Evaluation procedures to be tailored to fit each individual student in the class, rather than the same procedures for all students in the school or class; evaluation conceived as a daily procedure rather than at a few specific intervals during the year; student-teacher cooperative effort in planning how the evaluation procedures are to be conducted; less emphasis on formal standardized tests and more on teacher developed tests and daily informal evaluation procedures.